

ABSTRACT OF THE DISCLOSURE

A system and method for nondestructive automated headspace analysis. The system includes a container conveyor that conveys a plurality of generally optically transparent sealed test containers through a pre-inspection region, an inspection region and a post-inspection region of the container conveyor, and that conveys at least one sealed reference container, through the inspection region. Also included is a zone including a laser emitter and a sensor located in the inspection region and arranged such that the laser source emits a laser beam such that it intersects with a container movement path. The conveyor alternately conveys test containers and reference containers through the zone.